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10/663,225	09/16/2003	Kenneth R. Stott	63116-00006USPT	2119

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EXAMINER	
TOOR, SADAF A	

ART UNIT	PAPER NUMBER
3736	

DATE MAILED: 10/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/663,225	STOTT ET AL.	
	Examiner	Art Unit	
	Sadaf Toor	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 September 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/04/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because:

   a. They include the following reference character(s) not mentioned in the description: reference numeral "542" in Fig. 5C, and

   b. They do not include the following reference sign(s) mentioned in the description: reference numeral "800" as mentioned on page 22, line 7 should be added to Fig. 8A.

   Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities:

   a. Grammatical error on page 9, line 22. "It is also to possible to" should be changed to --it is also possible to--.

b. "Patient management component 312" is incorrectly labeled on page 10, line 9, page 20, lines 13 and 14, and page 21, line 2. "312" should be changed to --310-- to be consistent with Fig. 3 and the rest of the specification.

c. "Reporting component 310" is incorrectly labeled on page 10, line 10 and page 27, line 14. "310" should be changed to --312-- to be consistent with Fig. 3 and the rest of the specification.

d. "Paging options screen 550" is incorrectly labeled on page 14, line 11. "550" should be changed to --530-- to be consistent with Fig. 5C and the rest of the specification.

e. The word "trigonometry" on page 17, line 8 should be replaced by --tympanometry--.

f. "Patient training component 308" is incorrectly labeled on page 20, line 12. "308" should be changed to --306-- to be consistent with Fig. 3 and the rest of the specification.

g. Grammatical error on page 21, line 16. "Is" should be replaced by --are--.

h. Grammatical error on page 26, line 17. The words "the patient" should be removed.

i. Spelling error on page 27, line 2. "A company" should be changed to --accompany--.

j. Grammatical error on page 27, line 23. "Save" should be changed to --saved--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 2, 5, 6, 12-21, 27, 28, 31-34, 37 and 41-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Pavlakos ('056). Pavlakos teaches an Internet-based audiometric testing system. The system (see Fig. 1 and corresponding parts of the description) includes a patient information component (audiometric software 20 on remote Internet-based server CPU 18), a patient testing component (test site Internet-based client CPU 12 having hearing test equipment 14 and audiometric software 16), and a reporting component (audiometric software 20 on remote Internet-based server CPU 18). The user interface of CPU 12 includes a patient information component (see Figs. 2-4a), a patient testing component (see Figs. 5a-5c), a reporting component (see Figs. 6a-7), and a patient training component. Paragraph [0031], lines 11-18 teach that software 16 allows for entering basic information about the patient. Paragraph [0005] teaches the pure tone threshold test and Fig. 5a-5c show the screens used for this test. Paragraph [0026], lines 6-8 teach that the patient may use a touch screen to respond to hearing a tone. Fig. 4a depicts a patient survey screen for gathering hearing related information about the patient. Fig 7. illustrates a report screen and paragraph [0027], lines 6-9 teach that the audiometric software (16 and 20) responsible for the reporting component preferably be web-based and accessible via the Internet. Fig. 1 also shows the network connections between CPUs 12, 18, and 22. Paragraph [0035] teaches that certain screens of the system are designed to be edit accessible by the operator. Examiner interprets this to mean that the report layout is capable of be changed from a one-chart format to a two-chart format and vice versa. Fig. 7 and paragraph [0034], lines 17-19 teach that the report can be printed out. The report screen shown in Fig. 7 also teaches that the user can search for reports by providing a range of dates for the system to search in. The system then lists the reports corresponding to that date range and the user may view and print any or all

of the reports listed. Paragraph [0031], lines 1-4 teach that the software 16 includes a means for comparing two reports. Paragraph [0035] teaches that the screens are edit accessible, suggesting the operator can configure the automated hearing test. The "HINT" line in Figs. 2-4a and 5a-7 illustrate a patient training component of the interface configured to instruct the user regarding operation of the automated hearing test.

Referring to claim 28, Fig. 2 shows an input screen for inputting default information into the automated hearing test that can be used for all patients of a company.

Referring now to claims 31 and 34, Pavlakos teaches the ability to save the results of the automated hearing test (see Fig. 5c) so the system must inherently include a screen to define a name of each hearing related test performed by the automated hearing test. See Fig. 2 for input screen.

Referring to claims 32, 37, and 41-45 the system configuration, patient information, patient testing, and reporting components of the Pavlakos hearing test system have been discussed above. Examiner interprets "hearing testing equipment 14" (see paragraph [0026], lines 4-5) to include a transducer, which is common to hearing testing equipment.

Referring to claim 33, since Pavlakos audiometric testing system is Internet-based (see Fig. 1) it is inherent by use of the Internet that a computer identification screen and network option screen are used.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 22-25 and 47-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlakos ('056) in view of Brown ('563). As previously discussed, Pavlakos teaches a Internet-based audiometric testing system having a user interface including a system configuration component, a patient information component, a patient testing component, a reporting component, and a patient training component. However, Pavlakos fails to teach that the patient training component comprises one or more screens for providing general and specific information regarding the operation of the automated hearing test and one or more verbal messages for each screen. Pavlakos also fails to teach a patient management component. Brown teaches a remote health monitoring and maintenance system, which allows an operator to monitor and manage a health condition of a patient. The system includes an operator apparatus and a remotely programmable patient apparatus that is operated by the patient. Brown's system relates to blood glucose monitoring and testing, but it is inherently capable of being applied to audiometric testing as well. Column 5, lines 22-24 and column 21, lines 9-16 teach that the remote device (handheld microprocessor unit 12) has an interface that is adapted to display instructions for performing the test sequence and associated calibration and test procedures, and also to display warning messages if the test does not proceed in a normal fashion. See Fig. 4 and 5 and corresponding parts of the description. Column 33, lines 5-7 teach that the instructions and warning messages can also take the form of verbal messages. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide an automated hearing test interface similar to that of Pavlakos with a patient training component and patient management component similar to that of Brown in order to provide the test interface

with components for providing the patient with instructions and warning messages throughout the automated hearing test.

7. Claims 26 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlakos ('056) in view of Brown ('563) as applied to claim 24, 25, and 48 above, and further in view of Edwards et al. ('591). As previously discussed, Pavlakos teaches a Internet-based audiometric testing interface including a system configuration component, a patient information component, a patient testing component, and a reporting component, and Brown teaches a remote health monitoring and maintenance system having an interface including a patient training component and a patient management component. Brown, however, fails to teach that the patient management component comprises a progress indicator. Edwards et al. teach a system and method for remotely administered, interactive hearing tests. Paragraph [0113], lines 16-17 teaches that this web-based system having an interface that includes a progress bar (see Fig. 19 and 20) for indicating the progress of the patient during the automated hearing test. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide an automated hearing test interface similar to that of Pavlakos with a patient training component and patient management component similar to that of Brown, and with the patient management component further having a progress indicator similar to that of Edwards et al. in order to provide an indication of the progress of the patient during the automated hearing test.

8. Claims 7-10 and 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlakos ('056) in view of Edwards et al. ('591). As discussed above, Pavlakos teaches an

Internet-based audiometric testing system having an interface including a system configuration component, a patient information component, a patient testing component, and a reporting component. However, Pavlakos fails to teach that the patient testing component comprises a speech reception threshold test and a speech discrimination test. Edwards et al., as previously discussed, teach a system and method for remotely administered, interactive hearing tests. Paragraphs [0017], [0060], and [0069] teach that speech reception threshold testing and speech discrimination testing can be utilized in the Edwards et al. system. Therefore, it would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide an automated hearing test system similar to that of Pavlakos with the patient testing component comprising speech reception threshold testing and speech discrimination testing capabilities similar to that of the Edwards et al. system in order to provide a more thorough analysis of the patient's hearing through a variety of hearing tests.

9. Claims 3-4, 11, 29-30, 35, 36, and 40 are rejected under 35 U.S.C. 103(a) as being obvious over Pavlakos ('056) in view of Wasden et al. ('135).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference

under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

Referring to claims 11 and 40, as discussed in detail above, Pavlakos teaches an Internet-based audiometric testing system having an interface including a system configuration component, a patient information component, a patient testing component, and a reporting component. The patient testing component comprises a survey for gathering hearing related information about the patient. However, Pavlakos fails to teach that the patient testing component comprises tympanogram, acoustic reflex, and otoacoustic emission testing capabilities. Wasden et al. teach an apparatus for a bone conduction threshold hearing test used with a method and system for automated testing of a patients hearing. Paragraph [0059], lines 10-15 teach that the test includes acoustic emmittance testing and otoacoustic emission testing. Paragraph [0068], lines 5-6 and lines 11-12 further teach that acoustic emmittance tests includes tympanometric testing and acoustic reflex testing. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide an automated hearing test system similar to that of Pavlakos with the patient testing component comprising

tympanogram, acoustic reflex, and otoacoustic emission testing capabilities similar to that of the Wasden et al. system in order to provide a more thorough analysis of the patient's hearing.

Referring now to claims 3-4 and 36, Pavlakos teaches (Paragraph [0031], lines 11-18) that software 16 allows for entering basic information about the patient. The basic information fields (as illustrated in Fig. 3) include patient last name and first name, and social security number is used as a unique identifier for each patient. Since patient chart number is also a unique way to identify each patient, it would be a matter of design choice to one having ordinary skill in the art at the time Applicant's invention was made to use patient chart number instead of social security number. Wasden et al. teach (in paragraph [0060], lines 9-11) that the automated hearing test may be done in a number of languages. Since providing input fields is common in the multimedia user interface art, it would be a matter of design choice to provide a language field, similar to the other input fields shown in Fig. 3 of the Pavlakos system, to record patient testing language. The Pavlakos Internet-based audiometric testing system performs only one hearing test, so the need for a list of hearing related tests that may be selected is not present. However, making the obvious combination with the Wasden et al. system to provide for performing multiple tests (see Wasden et al. paragraph [0066], lines 1-11) would make it a matter of design choice for one of ordinary skill in the art at the time Applicant's invention was made to include a list of hearing related test that may be selected, since providing lists to select from is common to the multimedia user interface art. Referring to claims 29-30 and 35, Wasden et al. teach (see paragraph [0026], lines 5-12 and paragraph [0066], lines 11-14), that their hearing test system is capable of sending diagnostic messages to the operator in the event that an intervention is needed. They further teach that this could be when the patient is not responding, when the patient

is responding inappropriately, or when the patient has completed the automated hearing test. If the paging capabilities of the Wasden et al. system were combined with the automated hearing test system of Pavlakos, the system would inherently have to include a paging encoding and paging options screen to input paging encoding information and to define the events for which the automated hearing test will page the operator. This information would have to be input and defined somewhere in the system, and it is a matter of design choice to employ screens of the multimedia user interface for this purpose.

10. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pavlakos ('056) in view of Brown ('563) as applied to claims 1, 21, 24, and 27 above, and further in view of Wasden et al. ('135).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer in

accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(l)(1) and § 706.02(l)(2).

As discussed above, Pavlakos teaches an Internet-based audiometric testing system including an interface having a system configuration component, a patient information component, a patient testing component, and a reporting component, and Brown teaches a remote health monitoring and maintenance system including a patient training component and a patient management component. As discussed above, Wasden et al. teach an apparatus for a bone conduction threshold hearing test used with a method and system for automated testing of a patients hearing. Paragraph [0059], lines 10-15 teach that the test includes acoustic emmittance, and paragraph [0068], lines 5-6 and lines 11-12 further teach that acoustic emmittance tests includes tympanometric testing and acoustic reflex testing. It would have been obvious to one having ordinary skill in the art at the time Applicant's invention was made to provide an automated hearing test system similar to that of Pavlakos with the patient training component and patient management component of Brown, further with the tympanogram/acoustic reflex component of Wasden et al. order to provide a more thorough analysis of the patient's hearing.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dietrich ('041) teaches a learning disabilities diagnostic system including a visual

assessment component and an auditory assessment component. Davis et al. ('875) teach a hearing aid fitting system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sadaf Toor whose telephone number is (703) 305-0474. The examiner can normally be reached on Monday - Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

sat
09/22/04

CHARLES MARMOR
PRIMARY EXAMINER